

NEOTETRANYCHUS VICTORIAE SP. NOV. (ACARINA:TETRANYCHIDAE)
 A SPIDER MITE FOUND ON *SPYRIDIMUM PARVIFOLIUM* F. MEULL.
 IN VICTORIA

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ABSTRACT

Neotetranychus victoriae sp. nov. is described. This species was found on the native plant *Spyridium parvifolium* F. Muell. in the Dandenong Ranges district of Victoria. *N. victoriae* is unlike any mite previously recorded from Australia, and represents a new generic record for this country.

Neotetranychus victoriae sp. nov.

MATERIAL EXAMINED

HOLOTYPE: Female (450 μ long to tip of palpi, 285 μ wide), The Basin—Dandenong Ranges district near Melbourne, Victoria, on *Spyridium parvifolium* F. Muell., J. J. Davis, 10.i.67, in Hoyer's medium, Qd Mus. W2951.

ALLOTYPE: Male (315 μ long to tip of palpi, 180 μ wide), same data as holotype, in Hoyer's medium, Qd Mus. W2952.

PARATYPES: Eight females, fourteen males, same data as holotype. One female in Heinze P.V.A. medium, Qd Mus. W2953, other paratypes, in Hoyer's and Heinze P.V.A. media, in collection of Queensland Department of Primary Industries. Mounted paratype females range from 420 μ to 465 μ long to tip of palpi, 270 μ to 300 μ wide, males from 300 μ to 375 μ and 165 μ to 195 μ .

DESCRIPTION

FEMALE: Body rounded, in life yellowish with dark lateral spots; stylophore broadly rounded in front; cuticular striae are fine and appear smooth, but in some preparations are seen to be very minutely lobed; dorsal hysterosomal striae irregularly longitudinal between the closely spaced third pair of dorso-central setae and between the inner sacral setae—striae between these two pairs of setae transverse but not in a defined rhomboidal pattern; the dorsal integument of much of the idiosoma presents an unusual irregular basketweave appearance due to the presence of small relatively raised areas; dorsal setae (fig. 1), long, thickly pubescent, fairly slender but scarcely

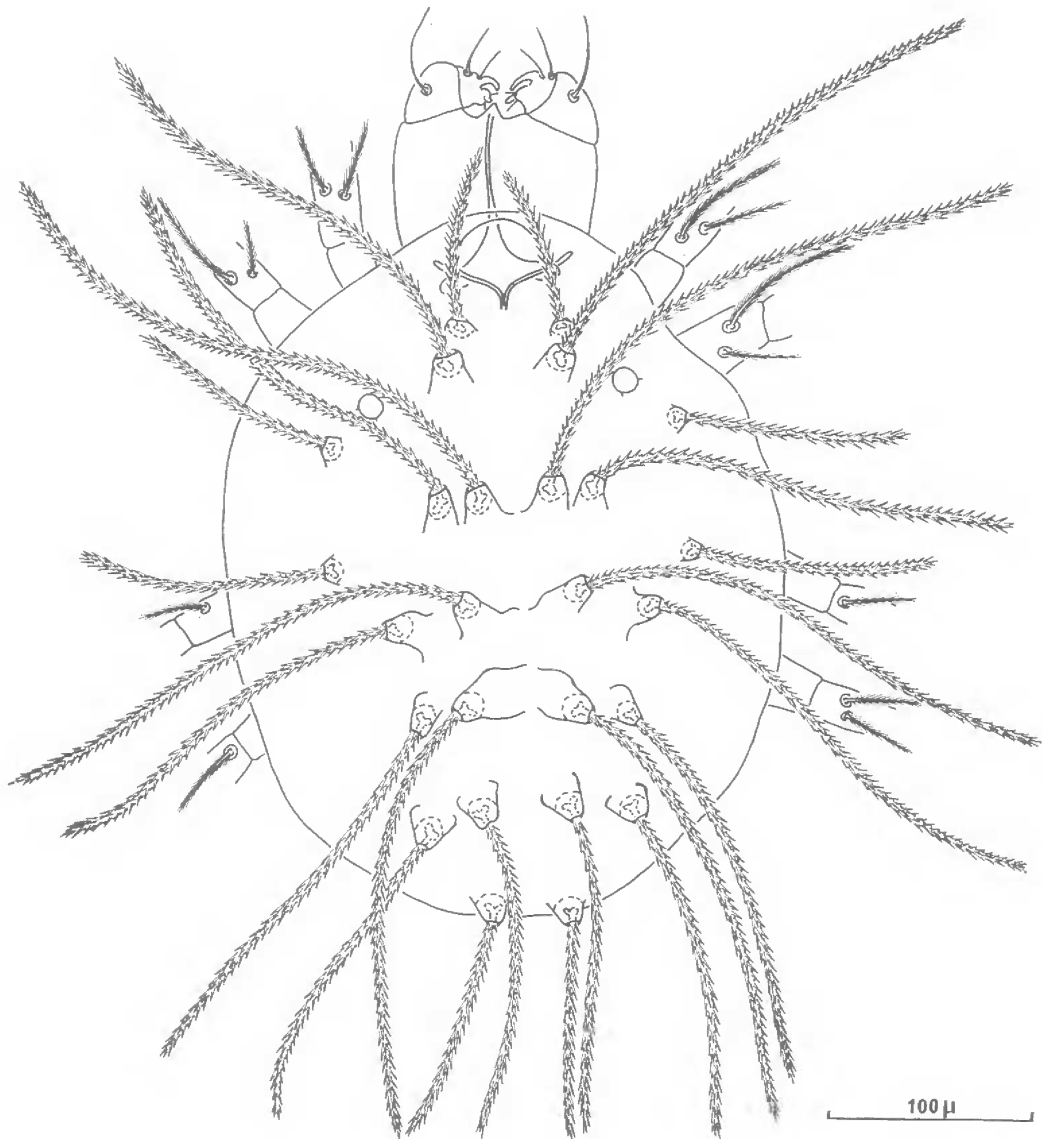


FIG. 1: *Neotetranychus victoriae*. Female, dorsal setae.

tapered—more or less cylindrical—and inserted on very strongly developed tubercles; the second pair of dorsal propodosomal setae, the dorso-central, and dorso-lateral hysterosomal setae are all similar in length, about three quarters as long as the body not including the palpi; the inner and outer sacral setae are about two-thirds as long as the dorso-central setae; the remaining dorsal setae—two pairs on the propodosoma and the humeral and clunal setae—are about one-third to one-half as long as the dorso-central setae; ventral striae transverse on the genital flap, a small area of longitudinal striae in front of the genital flap, then striae further forward transverse; two pairs of short slender finely pubescent para-anal setae present; peritreme almost straight distally, with slightly expanded bulb (fig. 2A,B); palpus with terminal sensillum well developed, nearly twice as long as wide, about half as long as the longer of two adjacent stout rod-like sensilla (fig. 2C); legs short, one half to two thirds as long as the body not including the palpi; tarsus I with three tactile setae and one sensory seta well proximal to the two pairs of duplex setae which are placed close together, tibia I with eight tactile setae and a very short, peg-like sensory seta distally on the dorsal side (fig. 2D); tibia II with seven tactile setae (fig. 2E); tibiae III and IV each with five tactile setae; empodia with short proximoventral hairs, often apparently only two pairs, but in some preparations a third pair can be seen (fig. 2F).

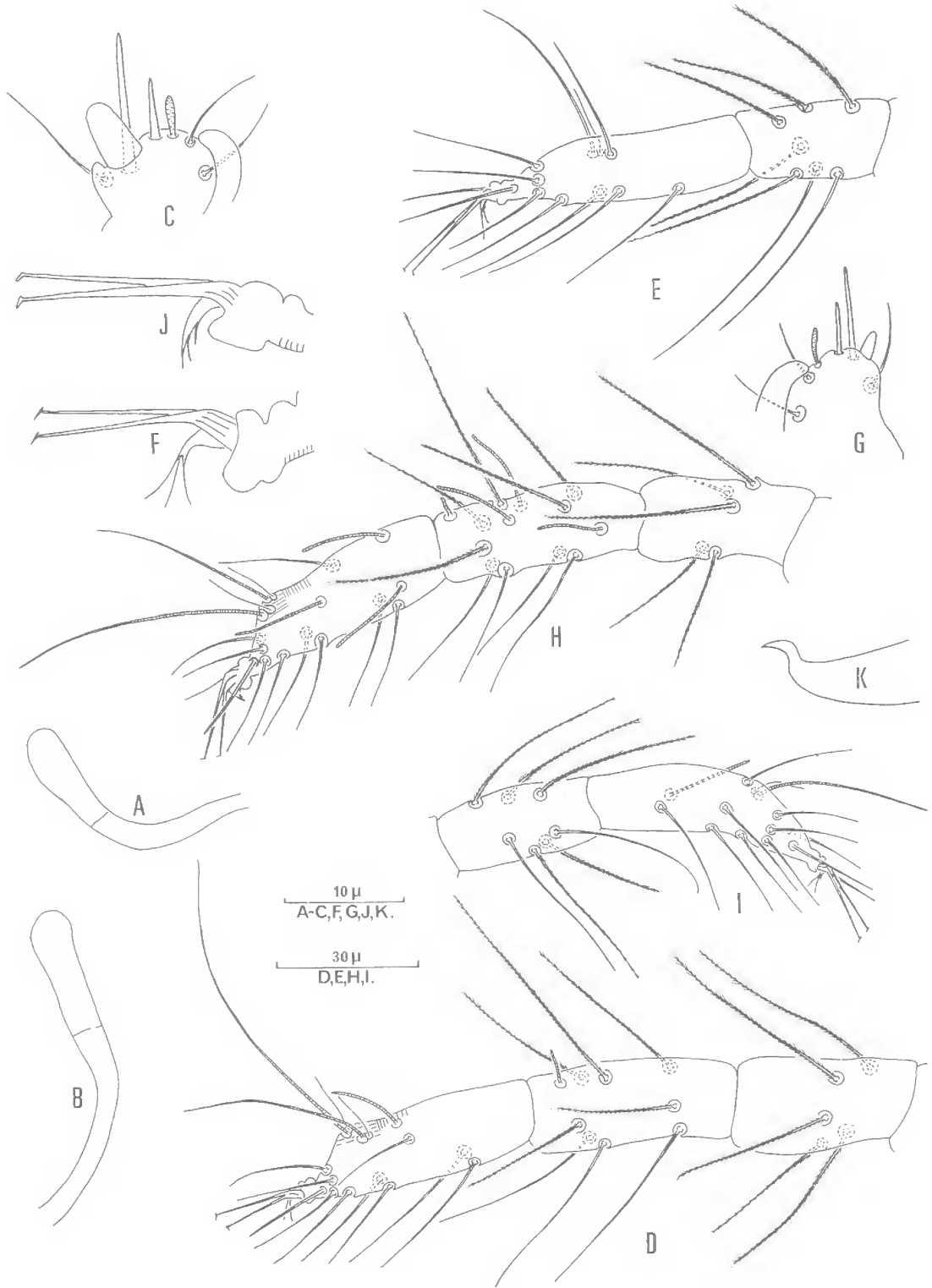
MALE: Body strongly tapered caudad; dorsal setae long, scarcely tapering, thickly pubescent, inserted on prominent tubercles; peritreme almost straight distally; palpus with terminal sensillum small, sub-conical, about twice as long as wide, about one third as long as the longer of the two adjacent rod-like sensilla (fig. 2G); legs short, from one third to a little over one half as long as the body not including the palpi; tarsus I with five tactile and two sensory setae proximal to the two pairs of duplex setae, tibia I with nine tactile and three long sensory setae, with one very short peg-like sensory seta distally on the dorsal side (fig. 2H); tibia II with seven tactile setae; (fig. 2I); tibiae III and IV each with five tactile setae; empodium I a slender claw-like structure with associated hairs (fig. 2J), other empodia resembling those of the female; aedeagus stout, bent dorsad, the dorsally directed part very short, then bent back to form a short caudad directed, sharp angulation (fig. 2K).

HABITAT

The mites occurred on the thickly haired undersides of the leaves of the host plant in a dusty situation by the roadside.

COMMENTS

Neotetranychus victoriae is unlike any spider mite previously recorded from Australia and is the first species from this country to be placed in *Neotetranychus* Trägårdh as this genus is presently understood. While resembling other species of the genus in the form and placement of the dorsal tubercles, *N. victoriae* is readily distinguishable by the shape of the dorsal setae, the setation of the legs, and the shape of the aedeagus.



The aedeagus of *N. victoriae* resembles that of a species in a related genus, *Mononychus georgicus* (Reck), but this mite from Georgian S.S.R. has relatively short dorsal setae inserted on tubercles which, though distinct, are not very strongly developed (Reck, 1948; Wainstein, 1960).

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LITERATURE CITED

- RECK, H. F., 1948. [Spider mite fauna (Tetranychidae: Acari) of Georgia.] *Tr. Inst. zool. Acad. -nauch. Gruz. S.S.R.*
- WAINSTEIN, B. A., 1960. [Tetranychid mites of Kazakhstan—with a revision of families]. *Trud. nauch.-issled. Inst. Zashch. Rast.* 5: 1-276 [In Russian].

FIG. 2: *Neotetranychus victoriae*. A, B, female, distal end of peritreme; C, female, terminal segment of palpus; D, female, genu, tibia tarsus I; E, female, tibia, tarsus II; F, female, distal appendages tarsus I; G, male, terminal segment of palpus; H, male, genu, tibia tarsus I; I, male, tibia and tarsus II; J, male, distal appendages tarsus I; K, male, aedeagus.